News and Resources from the National Institutes of Health

Kidney Disease Research Updates

National Kidney and Urologic Diseases Information Clearinghouse Winter 2011

Gene Variants That Prevent African Sleeping Sickness Increase Kidney Disease Risk

A gene that evolved to protect against trypanosomes—microscopic parasites endemic to sub-Saharan Africa that cause African sleeping sickness—increases kidney disease risk, according to a recent genetic analysis. Precisely how the genetic changes increase risk is unclear, but the finding may help explain why kidney disease disproportionately affects African Americans. The analysis was supported in part by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and reported in the August 13 issue of *Science*.

Analyzing DNA from African Americans, scientists found two variants of the gene *APOL1* that strongly associated with kidney disease. *APOL1* directs the production of ApoL1 protein, which is toxic to the trypanosome subspecies *T.b. brucei*. *T.b. brucei* and other trypanosomes are blood-borne pathogens, most often transmitted by the bite of the tsetse fly.

Scanning data from the 1000 Genomes Project, which catalogs human genetic variation around the world, the researchers found that one of the two variants, called G1, was present in 38 percent of DNA samples collected from the Yoruba people in West Africa. The second variant, G2, was present in 8 percent. Both variants were absent in European, Japanese, and Chinese samples. Additional analysis determined these variants evolved relatively recently over the past 10,000 years and have become increasingly prevalent.

Since ApoL1 protects against *T.b. brucei*, the researchers hypothesized G1 and G2 might be an adaptation to newly evolved trypanosome subspecies *T.b. rhodesiense* or *T.b. gambiense*, which are ApoL1-resistant.

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National Institute of Diabetes and Digestive and Kidney Diseases

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"Because these parasites exist only in sub-Saharan Africa, we hypothesized that the *APOL1* gene may have undergone natural selective pressure to counteract these trypanosome adaptations," wrote Martin R. Pollak, M.D., chief of Nephrology at Beth Israel Deaconess Medical Center, and colleagues.

"It will be interesting to determine the distribution of these mutations throughout sub-Saharan Africa."

Martin R. Pollak, M.D.
Chief of Nephrology, Beth Israel Deaconess Medical Center, and colleagues

In laboratory tests, ApoL1 proteins purified from people who had one or both gene variants killed *T.b. rhodesiense* but not *T.b. gambiense.* Samples from people who lacked either gene variant killed neither. Surprisingly, genomic screening showed the Yoruba people carry genetic resistance to a *T.b. rhodesiense,* a subspecies that prevails in East Africa, a region outside their present day homeland. The researchers suggested changes in trypanosome biology or distribution or human migration might explain this contradiction.

"It will be interesting to determine the distribution of these mutations throughout sub-Saharan Africa," wrote Pollak and colleagues. "Resistance to *T.b. rhodesiense* may not be the only factor causing these variants to be selected." The authors suggested the possibility that ApoL1 may provide resistance to additional pathogens.

New treatments for African sleeping sickness are potential byproducts of the discovery. African sleeping sickness is a degenerative and potentially fatal disease affecting tens of thousands of people in sub-Saharan Africa. ApoL1 protein purified from the blood of people carrying the G1 or G2 mutation, or lab-created ApoL1, could potentially treat African sleeping sickness caused by *T.b. rhodesiense,* according to the report.

More research is needed to understand why *APOL1* variants increase kidney disease risk. "Unraveling the molecular mechanisms by which they contribute to renal injury will be of great importance in understanding and potentially preventing renal disease in individuals of recent African Ancestry," wrote Pollack and colleagues.

For more information about the 1000 Genomes Project, visit *www.1000genomes.org.*

The NIDDK has easy-to-read fact sheets and booklets about kidney diseases. For more information or to obtain copies, visit *www.kidney.niddk.nih.gov.* ■

Kidney Disease
Research Updates

NKUDIC
National Kidney & Urologic Diseases Information Clearinghouse
www.kidney.niddk.nih.gov

Kidney Disease Research Updates, an email newsletter, is sent to subscribers by the National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC). The newsletter features news about kidney disease, special events, patient and professional meetings, and new publications available from the NKUDIC and other organizations.

You can read or download a PDF version or subscribe to the newsletter at *www.kidney.niddk.nih.gov/about/newsletter.htm.*

Executive Editor: Andrew S. Narva, M.D., F.A.C.P.

Dr. Narva is the director of the National Kidney Disease Education Program (NKDEP) within the National Institute of Diabetes and Digestive and Kidney Diseases. Prior to joining the NKDEP in 2006, he served as chief clinical consultant for nephrology and director of the Kidney Disease Program for the Indian Health Service. He has served as a member of the medical review board of ESRD Network 15, as a member of the steering committee of the National Kidney Foundation Kidney Early Evaluation Program (KEEP), and on the Kidney Disease Outcomes Quality Initiative (KDOQI) Diabetes and Chronic Kidney Disease Workgroup.

Lower Blood Pressure Goal Benefits African Americans with Chronic Kidney Disease and Protein in the Urine

On average, a lower blood pressure goal was no better than the standard blood pressure goal at slowing progression of kidney disease among African Americans who had chronic kidney disease (CKD) resulting from high blood pressure, according to results of the African-American Study of Kidney Disease and Hypertension (AASK).

"Rigorous, long-term studies like the AASK remain critically important for improving treatment of CKD and other diseases that develop over time, as it can take years for benefits of treatment to emerge."

Griffin P. Rodgers, M.D., M.A.C.P.
Director, NIDDK

The lower blood pressure goal, however, did benefit people who also had protein in the urine, a sign of kidney damage. In fact, among people with CKD and protein in their urine, keeping blood pressure at the lower level reduced the likelihood of kidney disease progression, kidney failure, or death by 27 percent compared with the standard blood pressure level, a statistically significant difference.

"For some patients, more intensive control of blood pressure may slow progression of chronic kidney disease," said Griffin P. Rodgers, M.D., M.A.C.P., director of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). "Rigorous, long-term studies like the AASK remain critically important for improving treatment of CKD and other diseases that develop over time, as it can take years for benefits of treatment to emerge."

Tailoring Treatment

The new information provided by the AASK may help doctors practice evidence-based, personalized medicine—the tailoring of treatment to patients' unique characteristics. "The AASK study is the largest and longest study of kidney disease in African-Americans. It is a landmark study that is paying off—guiding patient care and improving health outcomes," said Lawrence Appel, M.D., The Johns Hopkins University, who chaired the study.

In the United States, high blood pressure causes about a third of new kidney failure cases, also known as end-stage renal disease (ESRD). The cost to the Government and private payers for ESRD now exceeds $35 billion annually. The study results could help lower these costs by helping guide more effective treatments.

"For nearly two decades, the AASK research has provided valuable information about the most desirable, long-term chronic kidney disease treatment options for African-Americans, who bear a disproportionate burden of this debilitating disease," said Lawrence Agodoa, M.D., director of the Office of Minority Health Research Coordination at the NIDDK. "People who participate in studies like AASK provide important information on how to protect the kidneys and preserve overall health."

Clinical Trial and Follow-up

The study was conducted in two phases over 12 years, during which the AASK followed participants to measure the long-term effects of blood pressure control in African Americans with kidney disease attributed to high blood pressure.

Study participants were initially recruited beginning in 1995 for the AASK Clinical Trial, which

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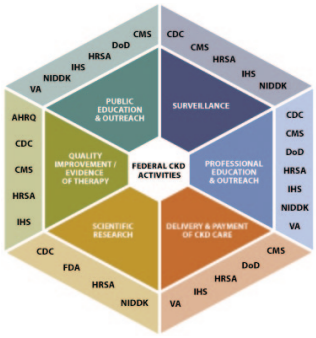
Report Calls for Increased Coordination of Federal CKD Prevention and Treatment Efforts

Increased coordination of federal health efforts would vastly improve chronic kidney disease (CKD) prevention and care, according to a recent report from the National Kidney Disease Education Program (NKDEP), part of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).



"Federal program managers experience difficulty in learning about, and staying abreast of, what other Federal agencies do related to CKD."

Andrew S. Narva, M.D., F.A.C.P.
Director, NKDEP, and co-authors

"Current Federal efforts span a range of missions, including surveillance, professional, and patient education, outreach to high-risk populations, quality improvement, and delivery of, as well as payment for, CKD treatment," wrote NKDEP Director Andrew S. Narva, M.D., F.A.C.P., and co-authors in the May 2010 issue of *Advances in Chronic Kidney Disease*. "However, Federal agencies do not function as a comprehensive system or, indeed, as a system at all."

Medicare spends more than $49 billion annually to care for patients with kidney disease. The NIDDK, together with other National Institutes of Health Institutes and centers, currently funds a $523 million kidney disease research portfolio. Other federal organizations, including the Centers for Disease Control and Prevention, the Indian Health Service, and the U.S. Department of Veterans Affairs, also contribute major funds and resources directed at CKD prevention and care.

Despite these enormous efforts, the percentage of people with CKD receiving recommended care has remained unchanged for many years. Fewer than 35 percent of people with diabetes and CKD are getting eye examinations or tests to measure blood sugar control or blood lipids. Blood pressure control among CKD patients remains poor. And despite tests that show the kidneys are not adequately filtering blood, many people with CKD are not being diagnosed and therefore are not receiving care to slow CKD progression.

About 23 million Americans 20 years old and older have CKD. Associated with diabetes, obesity, and cardiovascular disease, CKD prevalence has dramatically increased during the past 30 years. CKD is enormously expensive to treat, representing more than one-quarter of Medicare expenditures.

The report cited Quality Improvement Organizations (QIOs)—tasked by Congress to improve the quality of Medicare services—as having the potential to make great strides in CKD care quality. Each state has in place a QIO that consists of a private contractor or nonprofit organization. A recent initiative, called Ninth Scope of Work, focuses QIOs on determining the rate of diabetes-related kidney failure, slowing CKD progression by ensuring CKD patients are getting high blood pressure medication, and encouraging the early placement of arteriovenous fistulas—the best long-term vascular access—for CKD patients starting hemodialysis.

Kidney Interagency Coordinating Committee (KICC)

The KICC, chaired by Narva, brings together representatives from nine Government agencies involved in CKD to communicate and coordinate activities across sectors.

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lasted until 1998. Participants were randomly assigned to a standard blood pressure goal of roughly 140/90 millimeters of mercury (mmHg) or a lower goal of less than 130/80 mmHg. Patients with diabetes and some other serious health problems were excluded. After the conclusion of the clinical trial, AASK participants who had not yet developed ESRD were invited to participate in the AASK follow-up study beginning in 2002, in which everyone had a blood pressure goal of less than 130/80 mmHg.

In the follow-up study, recommended blood pressure therapy started with an angiotensin converting enzyme (ACE) inhibitor. This medication works by blocking the action of the protein angiotensin, which raises blood pressure. If blood pressure was not controlled, additional drugs were added. On average, patients needed about 3.5 medications for blood pressure each day. Millions of Americans take the drugs used in this study or drugs like them to treat health problems such as high blood pressure or heart disease.

"This study also highlights the importance of conducting long-term clinical studies," Appel said. "Without the follow-up study, the benefits of the lower goal would have been missed."

The AASK trial and the follow-up study were conducted at 22 U.S. medical centers and were funded by the NIDDK beginning in 1994. Additional support was provided by the National Institutes of Health's National Institute on Minority Health and Health Disparities, King Pharmaceuticals, and other pharmaceutical companies that donated study drugs. The current report appeared in the September 2 issue of *The New England Journal of Medicine.*

For more information about the AASK, visit *www.nih.gov/news/pr/nov2002/niddk-25.htm.*

For a list of centers enrolling patients for kidney disease trials, search keywords "kidney disease" at *www.ClinicalTrials.gov.*

For an NIDDK publication about high blood pressure and kidney disease, visit *www.kidney.niddk.nih.gov/kudiseases/pubs/highblood/index.htm.* ■

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"The barriers to achieving greater effectiveness begin with poor visibility," wrote Narva and co-authors. "Federal program managers experience difficulty in learning about, and staying abreast of, what other Federal agencies do related to CKD."

In response, the KICC developed an interactive, web-based tool that summarizes CKD-related activities from all nine KICC participating agencies. Called the KICC Matrix, the tool is available on the NKDEP website at *www.nkdep.nih.gov/about/kicc/index.htm.*

Recommendations

Among the report's recommendations are the creation of a cross-agency initiative to define CKD-relevant improvement measures, an assessment of current CKD clinical guidelines, the development of better kidney failure prediction tools, and the coordination of efforts to strengthen CKD educational materials for health care providers. The report also recommends looking for successful models of federal collaboration outside CKD prevention and care.

The NIDDK has easy-to-read booklets and fact sheets about CKD. For more information or to obtain copies, visit *www.kidney.niddk.nih.gov.* ■

Children with Kidney Disease Not Getting Enough Sleep

Children with chronic kidney disease (CKD) suffer from difficulty sleeping, weakness, fatigue, and daytime sleepiness, according to the National Institute of Diabetes and Digestive and Kidney Diseases' (NIDDK's) Chronic Kidney Disease in Children (CKiD) study. The largest prospective cohort study of CKD in North American youth, CKiD is assessing how kidney disease affects children's health and development. The 57-center study is following the health and kidney disease progression of about 500 children, ages 1 to 16 years old.

"Early detection and aggressive management of sleep problems and daytime fatigue have the potential to markedly improve functional outcomes and HRQOL in young patients with chronic kidney disease."

Maria-Eleni Roumelioti, M.D. and co-authors

"Unlike adults who have completed their physiologic and intellectual maturation, children are in formative stages of development and therefore are particularly vulnerable to the adverse effects of CKD and sleep deprivation," wrote Maria-Eleni Roumelioti, M.D., and co-authors in their February 2010 *American Journal of Kidney Diseases* report. Roumelioti is a former postdoctoral associate at the University of Pittsburgh Medical Center's Renal-Electrolyte Division.

Whereas adult CKD is frequently a consequence of hypertension or diabetes, CKD in children is more often due to a primary urologic problem such as a birth defect or a hereditary condition such as polycystic kidney disease. And because they are growing, children with CKD have unique health challenges and care requirements.

CKiD researchers looked at the relationship between measured glomerular filtration rate (mGFR)—a direct measure of the kidneys' blood filtering capacity—and the incidence and severity of sleep disturbances and fatigue as reported in a survey given to study children and their parents. The survey asked, among other things, if children had difficulty falling asleep at night, woke up too early, or fell asleep inadvertently during the day. The survey also asked about problems with low energy and weakness.

Almost 30 percent of children in the study reported "often" or "almost always" having trouble sleeping or low energy. Impaired mGFR was associated with self-reported weakness and falling asleep during the day. Children who had low birth weight or CKD for longer than 25 percent of their life were more likely to suffer from severe weakness, compared with children who had normal birth weight or CKD for less than 25 percent of their life. Fatigue—low energy and severe weakness—was strongly associated with decreased health-related quality of life (HRQOL). But HRQOL was not affected by waking up early, falling asleep during the day, or decreased alertness.

"Early detection and aggressive management of sleep problems and daytime fatigue have the potential to markedly improve functional outcomes and HRQOL in young patients with chronic kidney disease," wrote Roumelioti and co-authors, who suggest the study's findings will help guide those who care for children with CKD.

For NIDDK materials about kidney disease in children, visit *www.kidney.niddk.nih.gov/kudiseases/pubs/childkidneydiseases/index.htm.* ■

Cholesterol a Poor Predictor of Heart Disease in Some Kidney Disease Patients

A new report from the African-American Study of Kidney Disease and Hypertension (AASK) helps explain the ambiguous relationship between cholesterol and cardiovascular disease (CVD) risk among people with moderate to severe chronic kidney disease (CKD). The study suggests health care providers also consider CKD patients' weight and C-reactive protein—indicators of malnutrition and systemic inflammation—when assessing CVD risk.

"The pathogenesis of CVD in CKD is complex, with multiple risk factors contributing to the disease."

Gabriel Contreras, M.D.
Associate Professor of Medicine, Miller School of Medicine, University of Miami, and colleagues

Elevated cholesterol in people without kidney disease is a well-established risk factor for CVD. To reduce CVD risk, health care providers advise their patients to reduce cholesterol through dietary changes and medication. Studies supporting this clinical goal in patients with moderate to severe CKD, however, are inconclusive. While some studies demonstrate an association between cholesterol and CVD risk, others find no link.

Looking at data from the AASK, the researchers tested whether the presence of inflammation, malnutrition, or both changed the relationship between cholesterol and CVD risk. Inflammation was defined as having a C-reactive protein—a protein in the blood that increases in response to disease or infection—level above 10 milligrams per liter. Malnutrition was defined as a body mass index (BMI) of less than 23. BMI is an evaluation of a person's weight in relation to height.

Supported in part by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), the AASK is the largest study of CKD in African Americans. The study's goals are to determine the underlying causes of CKD, which disproportionately affects African Americans, and find better ways to slow its progression.

Of the 990 participants with pre-dialysis CKD included in the analysis, 31 percent had either malnutrition or inflammation or both (M-I).

During a 6-year period the occurrence of heart attack, stroke, death, or first hospitalization for coronary artery disease was similar to participants without M-I; however, elevated cholesterol was a risk factor only for the participants without M-I.

The finding indicates that while cholesterol is an important indicator of CVD risk, so too is M-I. "The pathogenesis of CVD in CKD is complex, with multiple risk factors contributing to the disease," wrote Gabriel Contreras, M.D., associate professor of Medicine at the University of Miami Miller School of Medicine, and colleagues in their report published online September 23, 2010, in the *Journal of the American Society of Nephrology*.

The report argues for better clinical tools for predicting CVD risk in the CKD population, where M-I is present in up to 77 percent of patients. "Our study provides strong evidence that the equation development process should consider the role of M-I and potentially test separate equations based on the presence or absence of M-I," Contreras and colleagues wrote.

The National Kidney and Urologic Diseases Information Clearinghouse, part of the NIDDK, has information about kidney disease. For more information, visit *www.kidney.niddk.nih.gov*. ■

HHS Launches Healthy People 2020

The U.S. Department of Health and Human Services (HHS) officially launched Healthy People 2020 on December 2, 2010, at the George Washington University in Washington, D.C. The event marked the formal release of the decade's national health promotion and disease prevention objectives.

"[Healthy People 2020] should no longer be known primarily as a print-based reference book to be kept on the shelf for a decade. It should also be a Web-accessible database that is searchable, multilevel, and interactive."

Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020

Each decade since 1980, the HHS has released a comprehensive set of national public health objectives. Known as Healthy People, the initiative has been grounded in the notion that setting objectives and providing benchmarks to track and monitor progress can motivate, guide, and focus action.

The HHS convened the Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020 to aid in the process of developing the next decade's guidelines. The Advisory Committee was charged with providing advice and consultation to the Secretary: 1) to facilitate the development and implementation of national health promotion and disease prevention goals and objectives, and 2) to inform the development of initiatives that will occur during initial implementation of the goals and objectives.

Healthy People 2020 should assist federal agencies in setting priorities and in providing funding and support to organizations and institutions that are able to help achieve the objectives. The Advisory Committee stated that Healthy People 2020 "should no longer be known primarily as a print-based reference book to be kept on the shelf for a decade. It should also be a Web-accessible database that is searchable, multilevel, and interactive."

Healthy People 2020's overarching goals include eliminating preventable disease, disability, injury, and premature death; achieving health equity, eliminating disparities, and improving the health of all groups; creating social and physical environments that promote good health for all; and promoting healthy development and behaviors across every stage of life.

Members of the public health community—especially federal, state, and local health agencies—have traditionally been viewed as the primary audiences for Healthy People. The Advisory Committee proposes that Healthy People 2020 be designed for use by a wider range of groups in both the public and private sectors. Tailored messages and products are needed to make Healthy People useful for this expanded audience-base, which should include the general public, voluntary organizations, faith-based organizations, businesses, health care providers, decision-makers, researchers, community-based organizations, grass-roots advocates, and others whose actions have significant health consequences.

The December 2 launch program included remarks by HHS Assistant Secretary for Health Howard K. Koh, M.D., and members of the Advisory Committee; an introduction and orientation to the Healthy People 2020 website and objectives; and a panel discussion about the uses of Healthy People 2020.

For more information about the Healthy People 2020 initiative, please visit *www.healthypeople.gov/HP2020.* ■

Administration Announces Regulations Requiring New Health Insurance Plans to Provide Free Preventive Care

The U.S. Departments of Health and Human Services (HHS), Labor, and the Treasury issued new regulations in July requiring new private health plans to cover evidence-based preventive services and eliminate cost-sharing requirements for such services. The new rules will help Americans gain easier access to services such as blood pressure, diabetes, and cholesterol tests; many cancer screenings; routine vaccinations; prenatal care; and regular wellness visits for infants and children.

"Getting access to early care and screenings will go a long way in preventing chronic illnesses like diabetes, heart disease, and high blood pressure."

Michelle Obama
First Lady

"Today, too many Americans do not get the high-quality preventive care they need to stay healthy, avoid or delay the onset of disease, lead productive lives, and reduce health care costs," said HHS Secretary Kathleen Sebelius. "From the Recovery Act to the First Lady's Let's Move Campaign to the Affordable Care Act, the Administration is laying the foundation to help transform the health care system from a system that focuses on treating the sick to a system that focuses on keeping every American healthy."

Chronic diseases, such as heart disease, cancer, and diabetes, are responsible for seven of 10 deaths among Americans each year and account for 75 percent of the nation's health spending—and often are preventable. Nationally, Americans use preventive services at about half the recommended rate. An estimated 11 million children and 59 million adults have private insurance that does not adequately cover immunization, for instance. Studies have shown that cost sharing, including deductibles, coinsurance, and copayments, reduces the likelihood that people will use preventive services.

"Getting access to early care and screenings will go a long way in preventing chronic illnesses like diabetes, heart disease, and high blood pressure," said First Lady Michelle Obama. "And good [preventive] care will also help tackle an issue that is particularly important to me as First Lady and as a mother—and that is the epidemic of childhood obesity in America today. These are important tools, and now it's up to us to use them."

"One of the best ways to improve the quality of your life—and control health care costs—is to prevent illness in the first place," said Second Lady Jill Biden. "Focusing on prevention and early treatment makes more sense than trying to play catch-up with a potentially deadly disease. Quite simply, these [preventive] services will save lives."

Under the recently issued regulations, new health plans beginning on or after September 23, 2010, must cover preventive services that have strong scientific evidence of their health benefits, and these plans may no longer charge a patient a

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NIH Pays Tribute to the First Woman Appointed Director of an NIH Institute, Ruth L. Kirschstein

Current and former National Institutes of Health (NIH) scientists and staff, as well as members of Congress, honored Ruth L. Kirschstein, M.D., the first woman appointed director of an NIH Institute, for the positive impact she made as a leader in the scientific community.

"Ruth Kirschstein was a legendary scientist and administrator."

David Obey
U.S. Representative,
Chairman of the House
Appropriations Committee

"Ruth embodied the spirit of NIH. She was an icon. She was loved and admired by so many at the NIH, across the medical research community, among hundreds of members of Congress, and around the world. There are few at the NIH who have not been touched by her warmth, wisdom, interest, and mentorship," said Francis S. Collins, M.D., Ph.D., director of the NIH.

Kirschstein, who passed away in 2009, was honored in 2010 with a tribute and symposium in her honor that featured four sessions with 11 featured speakers and ended with a reception. Scientists and researchers who received funds from the Ruth L. Kirschstein National Research Service Award presented the sessions. The awards have supported the work of thousands of researchers, and the quality of their research has elevated the program to the ranks of Fulbright Awards and Rhodes Scholarships.

As the first woman director of an NIH Institute—the National Institute of General Medical Sciences (NIGMS)—Kirschstein was known for mentoring young researchers, especially women and minorities. In 1993, Kirschstein became acting director of the NIH, and then served as the deputy director under NIH Director Harold Varmus for the next 6 years. She was acting director again from 2000 to 2002.

A Brooklyn native, Kirschstein wanted to be a doctor from a young age and fulfilled her dream after graduating *magna cum laude* in 1947 from Long Island University. She then went to Tulane University School of Medicine, where she was one of 10 women in a class of 100 men.

She interned in medicine and surgery at Kings County Hospital in Brooklyn and completed residencies in pathology in Detroit, New Orleans, and the then new NIH Clinical Center. In 1957, Kirschstein joined the Federal Government, beginning a 15-year stint as an experimental pathologist at the NIH Division of Biologics Standards, now known as the U.S. Food and Drug Administration (FDA) Center for Biologics Evaluation and Research.

In her first major accomplishment as a scientist, Kirschstein led the development of a safety test for the polio vaccine in the 1950s and 1960s. Ultimately, her work led to widespread adoption of the Sabin oral vaccine, especially in developing countries. Kirschstein continued to develop tests for the safety of vaccines for other diseases, including measles.

In 1974, after 2 years with the FDA, Kirschstein was appointed director of the NIGMS, a post she held for nearly 20 years. One of her most significant accomplishments as NIGMS director was her dedication to funding HIV/AIDS research and helping to establish the Genbank nucleic acid sequence database, which has been a

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copayment, coinsurance, or deductible for these services when they are delivered by a network provider. Specifically, these recommendations include the following:

- **Evidence-based preventive services.** The U.S. Preventive Services Task Force, an independent panel of scientific experts, rates preventive services based on the strength of the scientific evidence documenting their benefits. Preventive services with a "grade" of A or B—such as tobacco cessation counseling and screenings for breast and colon cancer, vitamin deficiencies during pregnancy, diabetes, high cholesterol, and high blood pressure—will be covered under these rules.
- **Routine vaccines.** Health plans will cover a set of standard vaccines recommended by the Advisory Committee on Immunization Practices. Such vaccines range from routine childhood immunizations to periodic tetanus shots for adults.
- **Preventive care for children.** Health plans will cover preventive care for children recommended under the *Bright Futures* guidelines, developed by the Health Resources and Services Administration with the American Academy of Pediatrics. These guidelines provide pediatricians and other health care professionals with recommendations on the services they should provide to children from birth to age 21 to keep them healthy and improve their chances of becoming healthy adults. The types of services that will be covered include regular pediatrician visits, vision and hearing screenings, developmental assessments, immunizations, and screening and counseling to address obesity and help children maintain a healthy weight.
- **Preventive care for women.** Health plans will cover preventive care provided to women under both the Task Force recommendations and new guidelines being developed by an independent group of experts, including doctors, nurses, and scientists, which are expected to be issued by August 1, 2011.

More information about the Affordable Care Act's new rules on preventive care can be found at *www.healthcare.gov/law/about/provisions/services/index.html.*

The regulations can be found at *www.healthcare.gov/center/regulations/prevention/regs.html.* ■

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critical tool for biomedical research. She championed myriad programs in basic biomedical research and research training that have helped to transform biomedical research.

"Ruth Kirschstein was a legendary scientist and administrator . . . a pioneer . . . a champion for the advancement of women and minorities in biomedical research . . . a strong advocate for research training, especially interdisciplinary predoctoral programs," said U.S. Representative David Obey, chairman of the House Appropriations Committee.

Kirschstein remained active at the NIH in her later years as a senior adviser; she was on a conference call with NIH Director Collins a week before her death. Kirschstein embodied the spirit of the NIH and was responsible for the career development of innumerable scientists and administrators. ■

Nurik Appointed Director of NIDDK Information Clearinghouses

Jody Nurik has been named director of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Information Clearinghouses. She will oversee long- and short-range plans and operations for the NIDDK's three national health information Clearinghouses and manage the Clearinghouses' support contract. Nurik will also manage the update and production of more than 300 award-winning print and online publications and three national awareness campaigns—bladder control for women, celiac disease, and bowel incontinence.

"Jody is extremely detail-oriented and gifted in big-picture-planning too."

Kathy Kranzfelder
Director, Office of Communications and Public Liaison, NIDDK, NIH

The Clearinghouses disseminate science-based health information to the public, health professionals, and the media. In 2009, the Clearinghouses handled nearly 79,000 information requests, received 6 million visitors to the NIDDK health information website, and distributed more than 1 million publications.

In 2004, Nurik oversaw the transition and establishment of all NIDDK Clearinghouse support contract operations to Circle Solutions, Inc., where she served as project manager. "Jody is extremely detail-oriented and gifted in big-picture-planning too," noted Kathy Kranzfelder, director, Office of Communications and Public Liaison, NIDDK, National Institutes of Health, and former director of the Clearinghouses. "From inquiry response to materials development to inventory database management to exhibit staffing and scheduling to reporting—the Clearinghouses will definitely benefit from new perspective and deep experience from Jody."

Prior to joining the NIDDK, Nurik was director of product marketing at Resolution Health/WellPoint, Inc., where she developed and managed health communications for health care providers and the public. In this role, Nurik led plain language initiatives, outreach campaigns, and market research with physicians and consumers to improve content and design.

Nurik has also managed an information center for the Health Resources and Services Administration, also part of the U.S. Department of Health and Human Services, and has launched adult and pediatric diabetes disease management programs at one of the largest home health companies in the United States. Nurik began her career as a nurse, moving up to supervise urology units of a hospital affiliated with Baylor College of Medicine.

To learn more about the NIDDK Information Clearinghouses, visit *www.niddk.nih.gov.* ■

Nutrition for CKD Patients

The National Kidney Disease Education Program has developed a suite of materials to help general practice registered dietitians (RDs) provide effective medical nutrition therapy (MNT) to chronic kidney disease (CKD) patients who are not on dialysis. The purpose of MNT for CKD is to maintain good nutritional status, slow progression, and treat complications. These free, downloadable, and reproducible materials are designed to distill key information about CKD and diet for RDs and patients. Titles include the following:

For Registered Dietitians:

Chronic Kidney Disease and Diet: Assessment, Management, and Treatment, an overview guide about treating CKD patients who are not on dialysis.

For CKD Patients Who Are Not on Dialysis:

Eating Right for Kidney Health: Tips for People with CKD, a handout about the basics of nutrition and CKD.

Nutrition Tips for People with CKD, a collection of five, one-page handouts about sodium, protein, phosphorus, potassium, and food label reading.

Your Kidney Test Results, a tool for test result assessment and patient education.

To view or download these materials, visit *www.nkdep.nih.gov/professionals/ckd-nutrition.htm.* ■

Would you like to know more about NIDDK-supported research?

The National Institutes of Health (NIH) provides access to a variety of reporting tools, reports, data, and analyses of NIH research activities at the Research Portfolio Online Reporting Tools (RePORT) website, *www.projectreporter.nih.gov/reporter.cfm.* One of the tools available is RePORT Expenditures and Results (RePORTER), which allows users to search a repository of NIH-funded research projects and access and download publications and patents resulting from NIH funding. ■

Upcoming Meetings, Workshops, and Conferences

The National Institute of Diabetes and Digestive and Kidney Diseases Information Clearinghouses will exhibit at the following upcoming events:

National Association of Pediatric Nurse Practitioners 32nd Annual Conference on Pediatric Health Care

March 23–26 in Baltimore.
For more information, visit *www.napnap.org/Events/AnnualConference.aspx*.

American Nephrology Nurses' Association 42nd National Symposium

March 27–30 in Boston.
For more information, visit *www.annanurse.org*.

American College of Physicians Internal Medicine 2011

April 7–9 in San Diego.
For more information, visit *www.acponline.org/meetings/internal_medicine/2011*.

Association of Health Care Journalists Health Journalism 2011

April 14–17 in Philadelphia.
For more information, visit *www.healthjournalism.org*.

National Kidney Foundation 2011 Spring Clinical Meetings

April 26–30 in Las Vegas.
For more information, visit *www.kidney.org*.

American Urological Association 2011 Annual Meeting

May 14–19 in Washington, D.C.
For more information, visit *www.auanet.org*.

American College Health Association 2011 Annual Meeting

May 31– June 4 in Phoenix.
For more information, visit *www.acha.org*.

American Academy of Physician Assistants 39th Annual Conference

May 31–June 4 in Las Vegas.
For more information, visit *www.aapa.org*. ■

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